

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: March 1, 2001, 15:47:18 ; Search time 210.42 Seconds
(without alignments)
7.638 Million cell updates/sec

Title: US-09-331-631a-7_COPY_34_80

Perfect score: 258
Sequence: 1 YERPRQOYEQCQRCESEA.....QCQRCREYEQQRQEE 47

Scoring table:
BLOSUM62
Gapop 10.0 , Gapept 0.5

Searched: 268485 seqs, 34193795 residues

Total number of hits satisfying chosen parameters: 268485

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 08
Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_36.*
1: /SIDSI/gcgdata/geneseq/geneseqp/AA1980.DAT.*
2: /SIDSI/gcgdata/geneseq/geneseqp/AA1981.DAT.*
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14: /SIDSI/gcgdata/geneseq/geneseqp/AA1993.DAT.*
15: /SIDSI/gcgdata/geneseq/geneseqp/AA1994.DAT.*
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18: /SIDSI/gcgdata/geneseq/geneseqp/AA1997.DAT.*
19: /SIDSI/gcgdata/geneseq/geneseqp/AA1998.DAT.*
20: /SIDSI/gcgdata/geneseq/geneseqp/AA1999.DAT.*
21: /SIDSI/gcgdata/geneseq/geneseqp/AA2000.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	258	100.0	525	19 W62831	Theobroma cacao an
2	258	100.0	566	13 R20181	Sequence encoded b
3	157	60.9	625	19 W62830	Macadamia integrif
4	157	60.9	666	19 W62829	Macadamia integrif
5	154	59.7	666	19 W62832	Macadamia integrif
6	124	48.1	590	19 W62832	Gossypium hirsutum
7	94	36.4	611	20 Y29039	T. gondii immunoge
8	92	33.7	562	16 R70491	Leucocytosoma prot
9	86	33.3	1898	20 Y30795	A human trichohyal
10	85	32.9	1162	21 Y58500	HHV8 ORF 73 protei
11	82.5	32.0	186	18 W26536	Trypanosoma cruzi
12	82.5	32.0	186	20 Y23298	Trypanosoma cruzi a

13	82	31.8	1135	21 Y68784	Amino acid sequenc
14	82	31.8	1233	20 Y55954	Mouse STRE20-relate
15	82	31.8	1239	20 Y55931	Human ZC1 protein.
16	80	31.0	86	20 W95073	GST-HD fusion prot
17	80	31.0	86	20 W95078	GST-HD fusion prot
18	80	31.0	94	20 W95075	GST-HD fusion prot
19	80	31.0	94	20 W95080	GST-HD fusion prot
20	79	30.6	910	20 Y22191	Human brain CNG-1
21	78	30.2	360	17 W03627	Human foallicle sti
22	77	29.8	371	20 W73369	Epitope tagged TBP
23	77	29.8	412	17 W03626	Human thymotropin
24	76.5	29.7	1297	20 Y55932	Human ZC2 protein.
25	76	29.5	482	20 Y07067	Renal cancer assoc
26	76	29.5	740	13 R27530	Plasmodium falcipa
27	76	29.5	740	16 R68838	Plasmodium falcipa
28	76	29.5	1360	21 Y85263	Human protein kina
29	75	29.1	1299	21 Y86633	Human protein regula
30	74.5	28.9	314	20 W88499	Human stomach carc
31	74.5	28.9	326	20 Y20109	B. burgdorferi ant
32	74.5	28.9	347	20 Y20108	B. burgdorferi ant
33	74	28.7	28	19 W62841	Stenocarpus sinuat
34	74	28.7	712	18 W30749	Rat YN521 gene pro
35	74	28.7	1132	17 R97866	Chicken leucocytos
36	74	28.7	1326	20 Y55933	Human ZC3 protein.
37	73.5	28.5	303	15 R60054	Dirotifaria immiti
38	73.5	28.5	346	20 Y20115	B. burgdorferi ant
39	73.5	28.5	373	20 Y20114	B. burgdorferi ant
40	73	28.3	1197	21 Y57445	Mouse Eze2 protein
41	73	28.3	1658	21 Y57450	Mouse Eze2 protein
42	73	28.3	2074	21 Y54319	Amino acid sequenc
43	72.5	28.1	288	20 W72759	Recombinant human
44	72	27.9	1012	20 Y17406	Human atrophin-1 r
45	71.5	27.7	905	18 W31186	Human p160 polypep

ALIGNMENTS

RESULT 1	
ID W62831	standard; Protein: 525 AA.
AC W62831;	
DT 27-OCT-1998	(first entry)
DE Theobroma cacao antimicrobial protein.	
OS antimicrobial protein; infestation; control.	
XX Theobroma cacao.	
OS	
XX W09827805-A1.	
PN 02-JUL-1998.	
PD	
XX 22-DEC-1997;	97WO-AU00874.
PF	
XX 20-DEC-1996;	96AU-0004275.
PR	
XX (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.	
PA Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;	
PI WPI: 1998-377279/32.	
DR	
XX Novel anti-microbial protein from e.g. Macadamia integrifolia -	
PT useful for controlling microbial infestations of plants or mammals	
PS Claim 1; Page 47-49; 96pp; English.	
XX The sequence is that of an antimicrobial protein which can	
CC be used to control microbial infestations in plants and mammalian	

CC animals.
XX
SQ Sequence 525 AA;

Query Match 100.0%; Score 258; DB 19; Length 525;
Best Local Similarity 100.0%; Pred. No. 2,5e-21;
Matches 47; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 YRDRPROQYECORCESEATEEREOPOCEORCEREYKEQORQOEE 47
|||||
Db 34 yerdprqygcqrcrceateereqecqrcrereykeqrgqgee 80

RESULT 2
R20181
ID R20181 standard; Protein; 566 AA.

AC R20181;

DT 16-APR-1992 (first entry)

DE Sequence encoded by 67 kD T. cacao protein CDNA.

KM Cocoa; flavour; vicillin; seed storage protein.

OS Theobroma cacao.

PN WO9119801-A.

PD 26-DEC-1991.

PF 07-JUN-1991; 91WO-GB00914.

PR 11-JUN-1990; 90GB-0013016.

PA (MNSC) MARS UK LTD.

PI Spencer ME, Hodge R, Deakin EA, Ashton S;

DR WPI: 1992-024418/03.

DR N-PSDB: Q20377.

PT Recombinant cocoa proteins - are responsible for flavour in cocoa
beans and produced in large quantities using yeast and bacterial
expression vectors

PS Claim 4; Fig 2; 59pp; English.

XX The inventors claim a 67 kD and 31 kD T. cacao protein, and
CC fragments, and encoding DNAs. The 47 kD and 31 kD proteins are
CC derived from the 67 kD precursor. T. cacao protein CDNA was
CC detected in a cDNA library prepared from immature cocoa beans RNA
CC using a probe based on the AA sequence of a CNBR peptide common to
CC the 47 kD and 31 kD polypeptides. Homology searches revealed close
CC homologies between the 67 kD polypeptide and the vicillins, which are
CC seed storage proteins.

SQ Sequence 566 AA;

Query Match 100.0%; Score 258; DB 13; Length 566;
Best Local Similarity 100.0%; Pred. No. 2,7e-21;
Matches 47; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 YRDRPROQYECORCESEATEEREOPOCEORCEREYKEQORQOEE 47
|||||
Db 34 yerdprqygcqrcrceateereqecqrcrereykeqrgqgee 80

RESULT 3
W62830
ID W62830 standard; Protein; 625 AA.

XX
AC W62830;
XX
DT 27-OCT-1998 (first entry)

DE Macadamia integrifolia antimicrobial protein.
XX
KW antimicrobial protein; infestation; control.

OS Macadamia integrifolia.

EH Key

FT Peptide

FT Protein

FT /note= "signal peptide"

FT /note= "mature protein"

PN WO9827805-A1.

PD 02-JUL-1998.

PF 22-DEC-1997; 97WO-AU00874.

PR 20-DEC-1996; 96AU-0004275.

PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.

PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;

DR WPI: 1998-377279/32.

DR N-PSDB: V42316.

PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
useful for controlling microbial infestations of plants or mammals

PS Claim 1; Page 43-45; 96pp; English.

CC The sequence is that of an antimicrobial protein which can
CC be used to control microbial infestations in plants and mammalian
CC animals.

SQ Sequence 625 AA;

Query Match 60.9%; Score 157; DB 19; Length 625;
Best Local Similarity 53.3%; Pred. No. 4,6e-10;
Matches 24; Conservative 13; Mismatches 8; Indels 0; Gaps 0;

OY 2 ERDPROQYECORCESEATEEREOPOCEORCEREYKEQORQOEE 46
:|||||
Db 78 qrdpqrqygcqrcrcrepretrpmtqicqrcrereykeqrgqk 122

RESULT 4

W62829
ID W62829 standard; Protein; 666 AA.

AC W62829;

DT 27-OCT-1998 (first entry)

DE Macadamia integrifolia antimicrobial protein.

KW antimicrobial protein; infestation; control.

OS Macadamia integrifolia.

EH Key

FT Peptide

FT Protein

FT /note= "signal peptide"

FT /note= "mature protein"

PN W09827805-A1.
 XX
 PS
 PD 02-JUL-1998.
 XX
 CC 22-DEC-1997; 97WO-AU00874.
 PF
 XX
 PR 20-DEC-1996; 96AU-0004275.
 XX
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
 XX
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
 XX
 DR WPI, 1998-377279/32.
 DR N-PSDB; V42310.
 XX
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
 useful for controlling microbial infestations of plants or mammals
 XX
 PS Claim 1; Page 39-41; 96pp; English.
 XX
 CC The sequence is that of an antimicrobial protein which can
 CC be used to control microbial infestations in plants and mammalian
 CC animals.
 XX
 SQ Sequence 666 AA;
 XX

Query Match 60.9%; Score 157; DB 19; Length 666;
 Best Local Similarity 53.3%; Pred. No. 4.9e-10;
 Matches 24; Conservative 12; Mismatches 9; Indels 0; Gaps 0;

OY 2 ERDPPOVEOCORCESEATEEREEOCEORCEKEKQROOE 46
 :||:||||| || : || : ||||| ||::||:|
 Db 119 grdpqyqegqecqrcqphetpimqtcqrcerreyekrkqk 163

RESULT 5
 W62828
 ID W62828 standard; Protein: 666 AA.
 XX
 AC W62828;
 XX
 DT 27-OCT-1998 (first entry)
 XX
 DE Macadamia integrifolia antimicrobial protein.
 XX
 KM antimicrobial protein; infestation; control.
 XX
 OS Macadamia integrifolia.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..28
 FT Protein /note="signal peptide"
 FT 29..666
 FT /note="mature protein"
 XX
 PN W09827805-A1.
 XX
 PD 02-JUL-1998.
 XX
 PF 22-DEC-1997; 97WO-AU00874.
 XX
 PR 20-DEC-1996; 96AU-0004275.
 XX
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
 XX
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
 XX
 DR WPI, 1998-377279/32.
 DR N-PSDB; V42310.
 XX
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
 useful for controlling microbial infestations of plants or mammals
 XX
 PT

XX
 PS Claim 1; Page 34-36; 96pp; English.
 XX
 CC The sequence is that of an antimicrobial protein which can
 CC be used to control microbial infestations in plants and mammalian
 CC animals.
 XX
 SQ Sequence 666 AA;
 XX

Query Match 59.7%; Score 154; DB 19; Length 666;
 Best Local Similarity 51.1%; Pred. No. 1e-09;
 Matches 23; Conservative 13; Mismatches 9; Indels 0; Gaps 0;

OY 2 ERDPPOVEOCORCESEATEEREEOCEORCEKEKQROOE 46
 :||:||||| || : || : ||||| ||::||:|
 Db 119 grdpqyqegqkhqrcrtephmqlcqrceerreyekrkqk 163

RESULT 6
 W62832
 ID W62832 standard; Protein: 590 AA.
 XX
 AC W62832;
 XX
 DT 27-OCT-1998 (first entry)
 XX
 DE Gossypium hirsutum antimicrobial protein.
 XX
 KW antimicrobial protein; infestation; control.
 XX
 OS Gossypium hirsutum.
 XX
 PN W09827805-A1.
 XX
 PD 02-JUL-1998.
 XX
 PF 22-DEC-1997; 97WO-AU00874.
 XX
 PR 20-DEC-1996; 96AU-0004275.
 XX
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
 XX
 PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
 XX
 DR WPI, 1998-377279/32.
 XX
 PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
 useful for controlling microbial infestations of plants or mammals
 XX
 PS Claim 1; Page 49-51; 96pp; English.
 XX
 CC The sequence is that of an antimicrobial protein which can
 CC be used to control microbial infestations in plants and mammalian
 CC animals.
 XX
 SQ Sequence 590 AA;
 XX

Query Match 48.1%; Score 124; DB 19; Length 590;
 Best Local Similarity 46.3%; Pred. No. 2e-06;
 Matches 19; Conservative 12; Mismatches 10; Indels 0; Gaps 0;

OY 4 DPROVEOCORCESEATEEREEOCEORCEKEKQROO 44
 ||:||||| || : ||:||||| ||: ||: ||
 Db 36 dppkryedcrricewdtrgkqgqceescksgygekdqg 76

RESULT 7
 Y29039
 ID Y29039 standard; Protein: 611 AA.
 XX
 AC Y29039;

XX 24-SEP-1999 (first entry)
DT
XX
XX T. gondii immunogenic protein.
DE
XX Immunogenic protein; Toxoplasma gondii protein; oocyst shedding; cat;
RW T. gondii infection; enteric apicomplexa oocyst; Cryptosporidium oocyst;
RV Toxoplasma oocyst.
XX
XX Toxoplasma gondii.
OS
PN WO9932633-A1.
XX
PD 01-JUL-1999.
XX
XX 18-DEC-1998; 98WO-US27137.
PF
XX 19-DEC-1997; 97US-0994825.
PR
XX (HESK-) HESKA CORP.
PA
PI Lutz SB, Milhausen MJ, Ng RK;
XX
DR WPI; 1999-418930/35.
XX N-PsDB; X91242.
DR
XX New isolated Toxoplasma gondii nucleic acids used, e.g. to treat
PT infection caused by this microorganism
PT
PS Claim 29; Page 227-229; 381pp; English.
XX
XX The invention provides isolated Toxoplasma gondii nucleic acids that
CC encode immunogenic polypeptides. The T. gondii nucleic acid molecules,
CC immunogenic proteins and antibodies to the proteins can be used to
CC inhibit T. gondii oocyst shedding in a cat due to infection with
CC T. gondii. They can be used for preventing T. gondii infection and for
CC preventing the spread of T. gondii infection. They can also be used for
CC detecting T. gondii infection. The detection method can be used to detect
CC parasite cysts or oocysts in feces, e.g. from enteric apicomplexa oocysts
CC such as Cryptosporidium oocysts and Toxoplasma oocysts.
XX
XX Sequence 611 AA;

	Query Match Similarity	45.2%	Score 94:	DB 20:	Length 611;
	Best Local Similarity		Pred No.	0.0043:	
	Matches	19;	Conservative	11;	Mismatches 12; Indels 0; Gaps 0
OY	6 RQNYEQCRRCSEATEEREHQDEQCQRCEKREYKEQDQQDEEE	47			
Dd	456 reeeerrrriveekkerereerreeerrrriveeekereregee	497			
	RESULT	8			
ID	R70491				
XX	R70491 standard; Protein; 562 AA.				
AC					
XX	R70491;				
DT	19-DEC-1995 (first entry)				
XX					
DE	Leucocytozoan protozoa structural protein epitope.				
KW	leucocytozoan protozoa; structural protein; epitope; vaccine; fowl;				
KW	leucocytozanosis; treatment.				
OS	Leucocytozoan protozoa sp.				
PN	Jp07089995-A.				
PD					
PF	10-SEP-1993; 93JP-0226078.				

XX	
PR	10-SEP-1993; 93JP-0226078.
PA	(DOBU-) DOBUTSUO SEIBUTSUGAKUTEKI SEIZAI KYOKAI.
FA	(NISS-) NISSEIKEN KK.
XX	
DR	WPI; 1995-167252/22.
DR	N-PADB; Q87587.
XX	
PT	Immune inducing polypeptide against Leucocytozoan protozoa - useful in production of vaccines for treatment of leucocytozanosis in fowl.
PT	
PS	Claim 1; Page 12-14; 20pp; Japanese.
XX	
CC	R70491-93 are polypeptides having a whole or partial epitope of a structural protein of Leucocytozoan protozoa encoded by Q87587-89. The polypeptides and DNA encoding them are useful in the production of vaccines for the treatment of leucocytozanosis of fowl.
CC	
XX	
SQ	Sequence 562 AA;

```

Query Match      35.7%; Score 92; DB 16; Length 562;
Best Local Similarity 39.1%; Pred. No. 0.0065;
Matches 18; Conservative 14; Mismatches 14; Indels 0; Gaps 0;
OY 2 EKDPOQTECCRCSEATEEREDQCEQRCERYKEEQDROQEE 47
      | | | | | | | | | | | | | | | | | | | |
db 41 ekeeeeeeeggeeggeeeveegdeeeegdeeeeeeekkeee 86
      | | | | | | | | | | | | | | | | | | | |

```

[illegible]

XX
AC Y30795;
XX
DT 25-NOV-1999 (first entry)
XX
DE A human trichohyalin (TRHY) protein.

KW	Human; trichohyalin; TRHY; protein; tissue structure; wound healing
KM	terminally differentiating epidermal tissue; proteaceous gel;
KN	breast implant.
XX	Homo sapiens.
SS	

XX	US5958752-A.
PN	
XX	
PD	28-SEP-1999.

XX	14-FEB-1997;	97US-0800644.
PF		
XX	30-APR-1993;	93US-0056200.
PR		

AA (USSH) US DEPT HEALTH & HUMAN SERVICES.
PA
XX
PI Kim I, Chung S, Park S, Steinert PM, lee S

AA WPI; 1999-561041/47.
DR N-PSDB; 222301.
DR

XX Human trichohyalin useful for forming a proteinaceous gel that promotes wound healing -

XX Disclosure; Fig 3A-W; 126pp; English.

XX The present sequence represents a human trichohyalin (TRHY) protein
CC The protein is found in terminally differentiating epidermal tissue
CC and is involved in forming the structural architecture of such
CC tissue. The trichohyalin protein is useful for forming a
CC proteinaceous gel which may then be used for healing wounds, or in

RESULT	12
ID	Y23298 standard; Protein: 186 AA.
XX	Y23298
AC	Y23298;
XX	
DT	31-AUG-1999 (first entry)
XX	
DE	Trypanosoma cruzi antigen amino acid sequence.
XX	
KW	Trypanosoma cruzi epitope; Trypanosoma cruzi infection; antigen; vaccine; Chagas' disease.
XX	
OS	Trypanosoma cruzi.
PN	MO99J1246-A1.
PD	24-JUN-1999.
XX	
PE	04-DEC-1998; 98WO-US25871.
XX	
PR	18-DEC-1997; 97US-0993674.
XX	
PA	(CORI-) CORIXA CORP.
P1	Houghton RL, Lodes MJ, McNeill PD, Reed SG, Skeiky YAW;
P1	Smith JM;
DR	WPI; 1999-405035/34.
XX	
PT	New isolated Trypanosoma cruzi epitopes
PS	Disclosure: Page 79; 103pp; English.
XX	
CC	The specification describes new Trypanosoma cruzi epitopes. A method for detecting Trypanosoma cruzi infection in a biological sample comprises contacting the sample with a polypeptide comprising an epitope of a TC antigen, or a variant of the antigen that differs only in conservative substitutions and/or modifications and detecting the presence of antibodies that bind to the polypeptide in the sample, thereby detecting TC infection. The TC polypeptides can be used in vaccines for inducing protective immunity against Chagas' disease in a patient. The polypeptides and antibodies can also be used for detecting TC infection. Y23292-301 represent Trypanosoma cruzi antigens.
CC	
CC	
CC	
SO	Sequence 186 AA;
Query Match	32.0%; Score 82.5; DB 20; Length 186;
Best Local Similarity	40.8%; Pred. No. 0.025;
Matches 20; Conservative 7; Mismatches 19; Indels 3; Gaps 1	
OY	2 EEDRQQTVEGCCRCESSEA---TEEREDQCCRCRCREYKKEGQRQDEEE 47
DB	II I : I : I I I I III : : I I I I I : II 69 enarreaeeraqraeeeraqrareearraetkaetrakeerawgeae 117
RESULT	13
ID	Y68784 standard; Protein: 1135 AA.
XX	Y68784
AC	Y68784;
XX	
DT	16-MAY-2000 (first entry)
XX	
DE	Amino acid sequence of a human phosphorylation effector PHS-16.
XX	
KW	Human; phosphorylation effector; PHS; proliferative disorder; immune disorder; neuronal disorder.
XX	
OS	Homo sapiens.
XX	
Key	Location/Qualifiers

FT	Modified-site	9	/note=	"potential phosphorylation site"
FT	Modified-site	17	/note=	"potential phosphorylation site"
FT	Region	31..54	/note=	"protein kinase signature sequence"
FT	Modified-site	33	/note=	"potential glycosylation site"
FT	Modified-site	59	/note=	"potential phosphorylation site"
FT	Modified-site	59	/note=	"potential phosphorylation site"
FT	Modified-site	77	/note=	"potential phosphorylation site"
FT	Modified-site	112	/note=	"potential phosphorylation site"
FT	Modified-site	124	/note=	"potential phosphorylation site"
FT	Region	129..182	/note=	"protein kinase signature sequence"
FT	Region	149..161	/note=	"protein kinase signature sequence"
FT	Modified-site	187	/note=	"potential phosphorylation site"
FT	Active-site	190..200	/note=	"tyrosine kinase catalytic site"
FT	Active-site	214..236	/note=	"tyrosine kinase catalytic site"
FT	Modified-site	222	/note=	"potential phosphorylation site"
FT	Modified-site	235	/note=	"potential phosphorylation site"
FT	Modified-site	259	/note=	"potential phosphorylation site"
FT	Modified-site	264	/note=	"potential phosphorylation site"
FT	Modified-site	309	/note=	"potential phosphorylation site"
FT	Modified-site	319	/note=	"potential phosphorylation site"
FT	Modified-site	321	/note=	"potential phosphorylation site"
FT	Modified-site	323	/note=	"potential phosphorylation site"
FT	Modified-site	324	/note=	"potential phosphorylation site"
FT	Modified-site	326	/note=	"potential phosphorylation site"
FT	Modified-site	351	/note=	"potential phosphorylation site"
FT	Modified-site	467	/note=	"potential phosphorylation site"
FT	Modified-site	543	/note=	"potential phosphorylation site"
FT	Modified-site	550	/note=	"potential phosphorylation site"
FT	Modified-site	554	/note=	"potential phosphorylation site"
FT	Modified-site	570	/note=	"potential phosphorylation site"
FT	Modified-site	572	/note=	"potential glycosylation site"
FT	Modified-site	624	/note=	"potential phosphorylation site"
FT	Modified-site	625	/note=	"potential phosphorylation site"
FT	Modified-site	632	/note=	"potential phosphorylation site"
FT	Modified-site	681	/note=	"potential phosphorylation site"
FT	Modified-site	682	/note=	"potential phosphorylation site"
FT	Modified-site	688	/note=	"potential phosphorylation site"

FT	/note= "potential phosphorylation site"
FT	689 /note= "potential phosphorylation site"
FT	706 /note= "potential phosphorylation site"
FT	718 /note= "potential phosphorylation site"
FT	720 /note= "potential glycosylation site"
FT	811 /note= "potential phosphorylation site"
FT	815 /note= "potential phosphorylation site"
FT	- /note= "potential phosphorylation site"
FT	Domain 836..1115 /note= "NIK1-like kinase domain"
FT	898 /note= "potential phosphorylation site"
FT	931 /note= "potential phosphorylation site"
FT	958 /note= "potential phosphorylation site"
FT	978 /note= "potential phosphorylation site"
FT	999 /note= "potential phosphorylation site"
FT	/note= "potential phosphorylation site"
FT	1012 /note= "potential phosphorylation site"
FT	1067 /note= "potential glycosylation site"
FT	1113 /note= "potential phosphorylation site"
FT	Modified-site
XX	
PV	WO200006728-A2.
PD	10-FEB-2000.
PF	28-JUL-1999; 99WO-US17132.
XX	
PR	28-JUL-1998; 98US-0123494.
PR	14-SEP-1998; 98US-0152814.
PR	14-OCT-1998; 98US-0173482.
PR	03-NOV-1998; 98US-0106889.
PR	19-NOV-1998; 98US-0109093.
PR	22-DEC-1998; 98US-0113796.
PR	12-JAN-1999; 99US-0173482.
PR	12-JAN-1999; 99US-0229005.
PA	(INCYTE PHARM INC.
PI	Hillman JL, Lal P, Tang YT, Corley NC, Guegler KJ, Baughn MR;
PI	Patterson C, Bandman O, Au-Young J, Gorgone GA, Yue H, Azimzai Y,
PI	Reddy R, Lu DM, Shih LL;
DR	WPI: 2000-183125/16.
DR	N-Psdb: Z46153.
PT	New human phosphorylation effectors useful for the diagnosis, treatment
PT	and prevention of proliferative, immune and neuronal disorders -
PS	Claim 1; Page 98-100; 142pp; English.
CC	Y68769-95 and Y68797-99 represent human phosphorylation effectors (PHSP)
CC	designated PHSPI-PHSP1 (the protein sequence for PHSP28 is not given
CC	in the specification). The sequences were isolated from cDNA libraries
CC	prepared from various human tissues. The PHSP proteins are useful for
CC	the diagnosis, treatment and prevention of proliferative disorders,
CC	immune disorders and neuronal disorders. The PHSP proteins form
CC	pharmaceutical compositions which useful for treating or preventing
CC	disorders associated with decreased PHSP expression/activity. PHSP
CC	antagonists are useful for treating or preventing disorders associated
CC	with increased PHSP expression/activity.

XX	Sequence	1135 AA:
XX	Query Match	31.8%; Score 82; DB 21; Length 1135;
XX	Best Local Similarity	45.7%; Pred. No. 0.17;
XX	Matches 21; Conservative	11; Mismatches 10; Indels 4; Gaps 2
OY	2 ERDPROOYEOCORRCESEATEERROOCRORCREKKEOOROE 47	
Db	416 erearrqetqrrege--ekrrlleelerr--rkeeeerrraee 457	
XX	RESULT 14	
ID	Y55954	
AC	Y55954 standard; Protein; 1233 AA.	
XX	Y55954;	
DT	18-FEB-2000 (first entry)	
DE	Mouse STE20-related protein kinase NTK_m.	
XX	Anti-rheumatic; antiarthritic; antiinflammatory; antiallergic; osteopathic;	
RW	antiporiatic; antiatherosclerotic; antiasthmatic; immunosuppressive;	
KW	neuroprotective; cardiac; cerebroprotective; cytostatic; antidiabetic;	
KW	voluntary; STE20; protein kinase; STIK2; STIK3; STIK4; STIK5; STIK6; STIK7;	
KW	ZC1, ZC2, ZC3, ZC4, KHS2, SULU1, SULU3, GEX2, PAK4, PAK5; antagonist;	
KW	antibody; gene therapy; rheumatoid arthritis; atherosclerosis; asthma;	
KW	inflammatory bowel disease; Crohn's disease; osteoarthritis; psoriasis;	
KW	rthritis; autoimmunity; organ transplantation; multiple sclerosis;	
KW	myocardial infarction; cardiovascular disease; stroke; renal failure;	
KW	oxidative stress-related neurodegenerative disorder; Parkinson's disease;	
KW	amyotrophic lateral sclerosis; Leigh syndrome; cancer; cardiomyopathy;	
KW	ischemic disorder; inflammation; diabetes mellitus; fibrosis; mitosis;	
RW	mesangial disorder; growth regulation; wound healing; T cell activation;	
XX	immunosuppressant.	
OS	Mus sp.	
XX	MO9953036-A2.	
PN	21-OCT-1999.	
XX	13-APR-1999; 99MO-US08150.	
PD	14-APR-1998; 98US-0081784.	
PR	(SUGEN-) SUGEN INC.	
XX	Plowman G, Martinez R, Whyte D;	
PA	WPI; 1999-611301/52.	
XX	Novel kinase-related polypeptides used for the diagnosis and treatment	
PT	of kinase-related diseases and disorders	
XX	Disclosure; Page 339-343; 387pp; English.	
XX	This sequence represents a novel STE20-related protein kinase. The	
CC	invention relates to nucleic acid molecule encoding a kinase polypeptide	
CC	selected from STIK2, STIK3, STIK4, STIK5, STIK6, STIK7, ZC1, ZC2, ZC3,	
CC	ZC4, KHS2, SULU1, SULU3, GEX2, PAK4 and PAK5. The proteins are used to	
CC	identify agonists and antagonists, and to raise antibodies. The	
CC	polynucleotides are useful in gene therapy protocols. The polynucleotides,	
CC	polypeptides, antibodies, antagonists and agonists may be used to treat	
CC	diseases such as immune-related disorders and diseases (e.g. rheumatoid	
CC	arthritis, atherosclerosis, chronic inflammatory bowel disease (e.g.	
CC	Crohn's disease), asthma, osteoarthritis, psoriasis, atherosclerosis,	
CC	rthritis, autoimmunity, and organ transplantation, chronic inflammatory	
CC	pelvic disease, multiple sclerosis, organ transplantation, myocardial	
CC	infarction, cardiovascular disease, stroke, renal failure, oxidative	
CC	stress-related neurodegenerative disorders (e.g. amyotrophic lateral	

